## **F41F**

APPARATUS FOR LAUNCHING PROJECTILES OR MISSILES FROM BARRELS, e.g. CANNONS (smallarms F41C); LAUNCHERS FOR ROCKETS OR TORPEDOES; HARPOON GUNS (functional features or details common to both smallarms and ordnance, mountings therefor F41A; projecting missiles without use of explosive or combustible propellant charge F41B)

#### **Definition statement**

This place covers:

Projectile launchers per se, except for smallarms which are covered in <u>F41C</u>, i.e. cannons, mortars, medium/large calibre guns, artillery guns, ordnance.

Launchers for self propelled missiles, i.e. rockets and torpedos.

Gravity propelled missile launchers and missile launching apparatuses without barrels.

#### References

## Limiting references

This place does not cover:

Mounting of armament on ships	<u>B63G</u>
Mounting of armament on aircraft	<u>B64D</u>
Functional features common to both smallarms and ordnance	<u>F41A</u>
Projecting missiles without use of explosive or combustible propellant charge	F41B
Smallarms	<u>F41C</u>
Self-propelled missiles	F42B 15/00
Torpedoes	F42B 19/00

# F41F 1/00

Launching apparatus for projecting projectiles or missiles from barrels, e.g. cannons (F41F 3/00 takes precedence); Harpoon guns

#### **Definition statement**

This place covers:

Includes the projectile launching apparatuses with a barrel which is larger than smallarms. A barrel being defined as a gun tube with a closable breech at the proximal end.

Includes mortars.

Includes harpoon guns projecting harpoons with a pyrotechnic charge.

## References

# Limiting references

This place does not cover:

Rocket or torpedo launchers	F41F 3/00
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Spring guns adapted to discharge harpoons	F41B 7/04
Compressed gas guns adapted to discharge harpoons	F41B11/08

# F41F 3/00

# **Rocket or torpedo launchers**

## **Definition statement**

This place covers:

Launchers for rockets, including portable rocket tubes and vehicle/infrastructure mounted rocket pods or silos.

Torpedo launchers from above (ship, land and air) and below the water surface.

## F41F 3/04

#### for rockets

#### **Definition statement**

This place covers:

Launchers for rockets, i.e. missiles including a warhead and a rocket propulsion system or self propelled missiles.

# F41F 3/048

# Means for imparting spin to the rocket before launching

## References

## Limiting references

This place does not cover:

# F41F 3/055

Umbilical connecting means {(Means for facilitating disengagement of electric line connector coupling parts in general H01R 13/633)}

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Command link guidance using wires	F41G 7/32
Wire guided self propelled missiles	F42B 15/04
Means for facilitating disengagement of electric line connector coupling parts	H01R 13/633

## F41F 3/07

# **Underwater launching-apparatus**

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangements on submarines for launching missiles	B63G 8/30
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## F41F 3/08

# for marine torpedoes {(F41A 23/22 takes precedence)}

#### References

## Limiting references

This place does not cover:

Disposition of guns on vehicles, gun mountings for disappearing guns on	F41A 23/22
board of submarines	

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangements on submarines of torpedo launch installations  B63G 8/32	
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# F41F 5/00

# Launching-apparatus for gravity-propelled missiles or projectiles (from aircraft B64D 1/04)

## **Definition statement**

This place covers:

Includes devices for dropping warheads from a certain height only propelled by gravity, e.g. from land vehicles or buildings.

#### References

## Limiting references

This place does not cover:

Laying of mines and depth charges	B63G 6/00
Dropping bombs from aircrafts	B64D 1/04

# F41F 7/00

Launching-apparatus for projecting missiles or projectiles otherwise than from barrels, {e.g. using spigots} (<u>F41F 3/04</u> takes precedence; {centrifugal sling apparatus <u>F41B 3/04</u>})

# **Definition statement**

This place covers:

Residual maingroup for projectile or missile launchers not covered by  $\underline{\mathsf{F41B}\ 1/00}$  -  $\underline{\mathsf{F41C}\ 9/08}$  and  $\underline{\mathsf{F41F}\ 1/00}$  -  $\underline{\mathsf{F41F}\ 5/04}$ .

## References

# Limiting references

This place does not cover:

Rocket launchers	F41F 3/04
Centrifugal sling apparatus	F41B 3/04